

Notice of Allowability

Application No.

10/730,329

Examiner

Kiet Doan

Applicant(s)

MCKENNA ET AL.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/14/06.
2. ☒ The allowed claim(s) is/are 1,4-7, 10, 12-14, 17-20, 23, 25-27, 30-33, 36, 38, 40-42, 46,47, 52, 58, 59, 64-66, 70, 71 and 76-78.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


GEORGE ENG
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

This office action is response to RCE file on 04/14/2006.

Claims 2-3, 8-9, 11, 15-16, 21-22, 24, 28-29, 34-35, 37, 45, 49-51, 57, 61-63, 69, 73-75 are cancelled.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Objected claims 11, 24 and 37 have been rewritten in independent form including all of the limitations of base claim and intervening claims. Therefore claims 1, 14 and 27 are allowed.

Claims 40-42, 46-47, 52, 58-59, 64-66, 70-71, and 76-78 was allow in previous Advisory Action mail on 03/23/2006 are state allowable in this instant action.

The prior art record, Consider **claims 1**. Rousseu (Patent No. 6,889,042) teaches a system for providing wireless communication services to a plurality of wireless subscriber devices that are located in an aircraft (Fig.1, No.TL1, TL2, Illustrate as plurality of wireless subscriber devices that are located in an aircraft) comprising:

aircraft network means located in said aircraft for generating radio frequency communication signals to communicate with at least one of said plurality of wireless subscriber devices that are located in said aircraft (Fig.1, BSS1, AV2 means as RF communicate with at least one of said plurality of wireless subscriber devices No.TL1, TL2); comprising:

aircraft cellular communication means for establishing at least one cell site to communicate via communications with at least one of said plurality of wireless

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subscriber devices (C3, L50-54, Fig.1, No.AN2, Illustrate as cell site/base station which communicate via communications with at least one of said plurality of wireless subscriber devices T11, T12).

Zicker (Patent No. 6,314,286) teaches a plurality of base station means to communicate via communications with at least one of said plurality of wireless subscriber devices, at least of said plurality of base station means operating in a cellular technology that differs from those of the remaining ones of said plurality of base station means (C4, L58-67, C5, L1-15, Fig.2, illustrate plurality of base station as No.40 and wireless subscriber devices as No.50),

Rousseu teaches air-to-ground network means for radio frequency communications between said aircraft and a ground-based communications network having at least one transceiver located on the ground (Fig.1, Illustrate No.AN1 as frequency communications between said aircraft and a ground-based communications network No.R1), comprising:

However, the combine of Rousseu and Zicker **are fails to teach**

a plurality of ground-base station means for communication with at least one of said plurality of wireless subscriber device; and

aircraft interface means for interconnecting said aircraft network means and said air-to-ground network means to establish communications between said plurality of wireless subscriber devices and said ground-based communications network by exchanging both subscriber traffic and at least one of network signaling and

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administrative data on separate concurrently available logical channels between said aircraft network means and said ground-base communications network, comprising:

data concentrator means for converting the individual traffic and signaling channels received from said plurality of base station means to an aggregate data stream;

wherein said air-to-ground network means further comprises:

data router disaggregator means for disaggregating said aggregate data stream by technology into a plurality of data streams and delivering each of said plurality of data streams to a corresponding one of said plurality of ground-base station means as substantially connect and specific detail including all of the limitations in particularly **recited in claims 1, 14, 27, 40-42, 52, 64, 76**

Claims 4-7, 10-13, 17-20, 23, 25-26, 30-33, 36, 38, 39, 43-44, 48, 53-56, 60, 65-68, 72 and 77-78 are allowed as being dependent on the independent claims 1, 14, 27 and 76.

The prior art record, Consider **claim 46**. Roux teaches a system for providing wireless communication service to a plurality of wireless subscriber devices that are located in an aircraft, comprising:

aircraft network means located in said aircraft for generating radio frequency communication signals to communicate with at least one of said plurality of wireless subscriber devices that are located in said aircraft (Fig.1, BSS1, AV2 means as RF communicate with at least one of said plurality of wireless subscriber devices No.TL1, TL2),

air-to-ground network means for radio frequency communications between said aircraft and a ground-based communications network having at least one transceiver located on the ground (Fig.1, Illustrate No.AN1 as frequency communications between said aircraft and a ground-based communications network No.R1), and

However, in combination or Roux reference are **fail s to teaches**

aircraft interface means for interconnecting said aircraft network means and said air-to-ground network means to establish communications between said plurality of wireless subscriber devices and said ground-based communications network by exchanging both subscriber traffic and at least one of network signaling and administrative data on separate concurrently available logical channels between said aircraft network means and said ground-base communications network, comprising:

in-cabin call termination means for providing a signaling termination for each call from a one of said wireless subscriber devices that are located in the aircraft to provide protocol management of signaling to both said ground-base communication network and said wireless subscriber , comprising:

first aircraft interface channel means for providing a radio frequency interface to the wireless subscriber device to provide a pseudo base station with transparent handset signaling, to mimic the operation of the ground base station means to the wireless subscriber device; and

second aircraft interface channel means for providing a radio frequency interface to the ground-base base station means to provide mirrored handset signaling to mimic the operation of the wireless subscriber devices to the ground-base base station means

as substantially connect and specific detail including all of the limitations in particularly **recited in claims 58 and 70**

Claims 47, 59 and 71 are allowed as being dependent on the independent claims 46, 58 and 71.

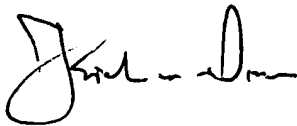
Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

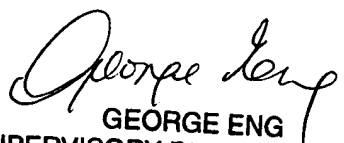
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kiet Doan
Patent Examiner



GEORGE ENG
SUPERVISORY PATENT EXAMINER